



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
INTERNATIONAL 51957
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 10W30 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0915461	WC0854858	WC0854834
Sample Date		Client Info		16 May 2024	18 Jan 2024	04 Oct 2023
Machine Age	kms	Client Info		345624	281191	354718
Oil Age	kms	Client Info		29960	32108	0
Filter Age	kms	Client Info		29960	32108	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	17	21	22
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>4	0	<1	<1
Titanium	ppm	ASTM D5185(m)		<1	0	0
Silver	ppm	ASTM D5185(m)	>3	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	2	4	3
Lead	ppm	ASTM D5185(m)	>40	2	1	2
Copper	ppm	ASTM D5185(m)	>330	<1	2	1
Tin	ppm	ASTM D5185(m)	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

There is no indication of any contamination in the oil.

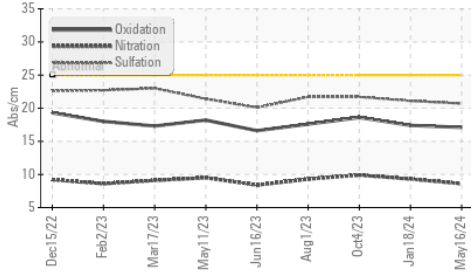
Silicon	ppm	ASTM D5185(m)	>25	2	4	5
Potassium	ppm	ASTM D5185(m)	>20	1	3	4
Fuel		WC Method	>2.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.3	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	8.6	9.3	9.9
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.7	21.1	21.7
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

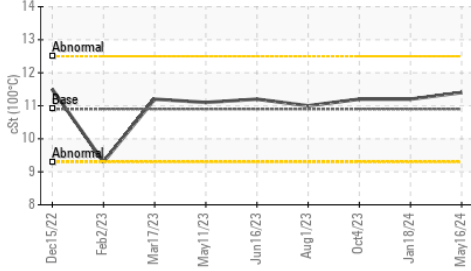
The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		2	1	2
Boron	ppm	ASTM D5185(m)	250	1	6	4
Barium	ppm	ASTM D5185(m)	10	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	100	60	61	64
Manganese	ppm	ASTM D5185(m)		<1	0	0
Magnesium	ppm	ASTM D5185(m)	450	988	976	1002
Calcium	ppm	ASTM D5185(m)	3000	1096	1083	1123
Phosphorus	ppm	ASTM D5185(m)	1150	980	1002	987
Zinc	ppm	ASTM D5185(m)	1350	1222	1208	1242
Sulfur	ppm	ASTM D5185(m)	4250	2336	2463	2305
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.1	17.4	18.6
Visc @ 100°C	cSt	ASTM D7279(m)	10.9	11.4	11.2	11.2

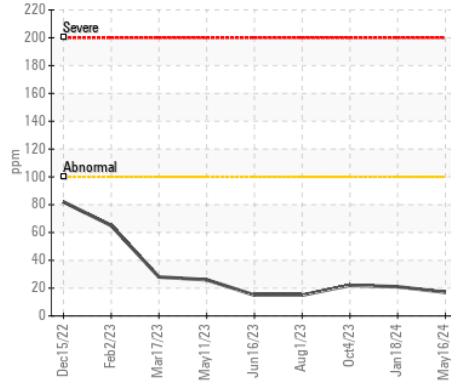
FT-IR (Direct Trend)



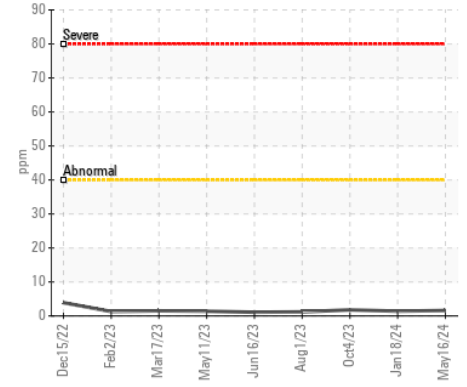
Viscosity @ 100°C



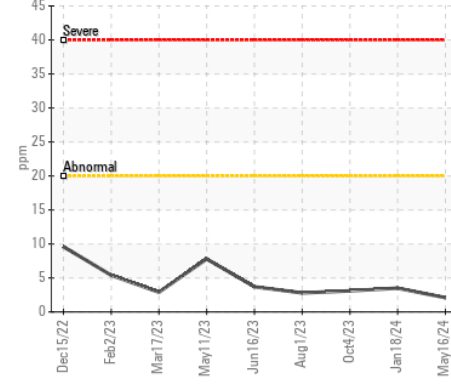
Iron (ppm)



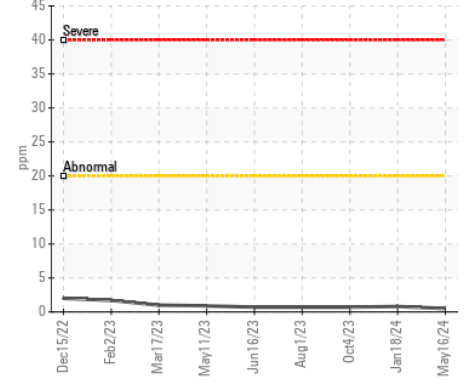
Lead (ppm)



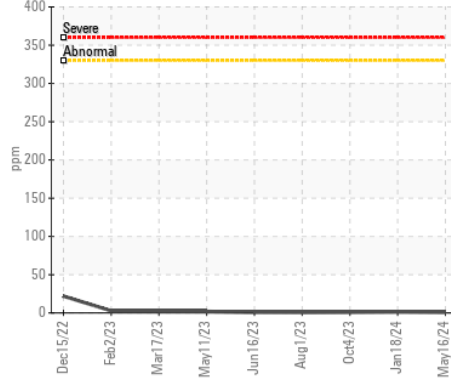
Aluminum (ppm)



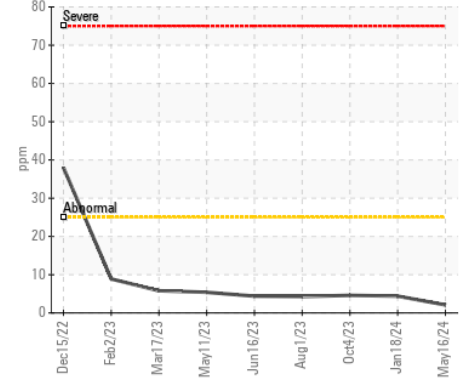
Chromium (ppm)



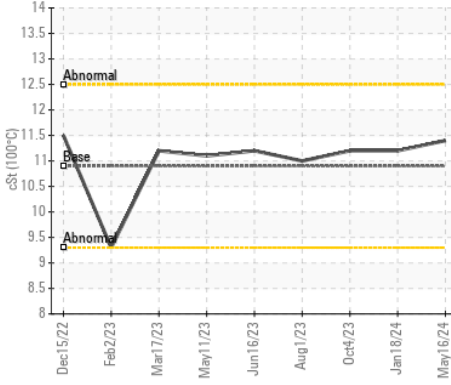
Copper (ppm)



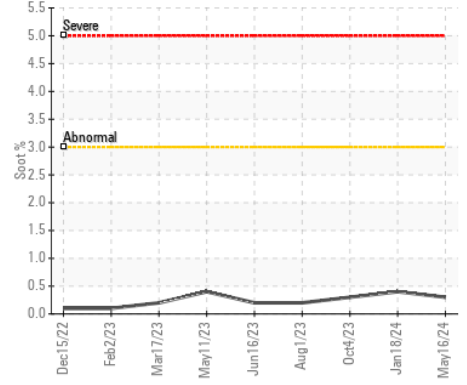
Silicon (ppm)



Viscosity @ 100°C



Soot %



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0915461 **Received** : 06 Jun 2024
Lab Number : 02640151 **Tested** : 06 Jun 2024
Unique Number : 5789313 **Diagnosed** : 06 Jun 2024 - Wes Davis
Test Package : MOB 1

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 75 MUMFORD ROAD
 LIVELY, ON
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To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.